

## The Challenge of the Decarbonization of Shipping and Complex Imo Regulations

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**Abstract :** The earth is being endangered by many of the climate related issues today. The most serious issue for the world today is the global warming. Increase in Greenhouse gas (GHG) emissions post-industrial revolution period is the prime reason for global warming. Shipping is the fifth largest GHG emitting sector worldwide. The key reason for this is because, over 90% of the world trade is conducted through ocean as the ocean alone covers 70% of the earth surface. While the countries continue to develop, trade and commerce continue to increase between them simultaneously. However, there is no sign of reduction in GHG emission from shipping because of many concerned issues. Firstly, there is technological barrier for which ships cannot just become environment friendly immediately. Secondly, there is no alternative fuel available as well. Thirdly, there is no proper mechanism to measure how much ships emit as emission from ships vary according to the size, engine type and loading capacity of ships. The International Maritime Organization (IMO) being the governing body of the international shipping has implemented MARPOL Annex VI. However, the policy alone is not enough unless there is a proper data available regarding ship emissions, which the IMO is yet to figure out. This paper will present a critical analysis of existing IMO policies such as the Energy Efficiency Design Index (EEDI), Ship Energy Efficiency Management Plan (SEEMP), Data Collection System (SEEMP) and the IMO's Initial Strategy on Reduction of Greenhouse Gas emissions from shipping. Also, the challenges exist in implementing such policies have been presented in the paper.

**Keywords :** GHG, IMO, EEDI, SEEMP, DCS, greenhouse gas, decarbonization, shipping

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